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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/912,383	07/26/2001	Michael J. Noe	200400101-1	5043

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EXAMINER

ZHONG, CHAD

ART UNIT	PAPER NUMBER
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2152

DATE MAILED: 02/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/912,383

Applicant(s)

NOE, MICHAEL J.

Examiner

Chad Zhong

Art Unit

2152

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 November 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 and 6-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 6-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

OFFICE ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/28/2005 has been entered. Applicant's remarks filed 11/28/2005 have been considered but are found not persuasive in view of the new grounds of rejection necessitated by Applicant's amendment. Claims 1-4, 6-14 are presented for examination; claims 1-2, 4, 6, and 13 are amended; claim 5 is cancelled.

2. Applicant is required to update the status (pending, allowed, etc.) of all parent priority applications in the first line of the specification. The status of all citations of US filed applications in the specification should also be updated where appropriate.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1 and 13 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Specifically, "wherein the threshold noise level is independent of the utilization rate" is not found anywhere within the specification, thus, this limitation is not supported.

Art Unit: 2152

Applicant intends to use negative limitation to exclude Roberts et al., US 2002-0110149.

Moreover this amendment does not place the application in better condition for allowance. Applicant must show negative result within the specification or point to unexpected results regarding to the negative limitation. For the purpose of examination, the Examiner will interpret the limitation as “threshold noise level and utilization rate are two separate variables”

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this office action:

A person shall be entitled to a patent unless --

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371 (c) of this title before the invention thereof by the applicant for patent.

5. Claims 1, 2, 4, 6, 7, and 12 are rejected under 35 U.S.C. 102(e) as being anticipated by Roberts et al. (hereinafter Roberts), US 2002/0110149.

6. As per claim 1, Roberts teaches a client-based method for managing transfer of a file having data from a networked device to a client system having a network connection, comprising the steps of:

(a) determining a type of the network connection (different types of network connection have different varying speeds, [0010], the types of connection as taught by Roberts comprises LAN, WAN or others ([0036]; [0037]; and Fig 1);

(b) automatically retrieving a threshold noise level corresponding to the network connection type (the threshold noise level is taught by Roberts, the noise level defines interference threshold per network connection, signals below the noise threshold will cause interference with other programs running on the network, where as signals above the noise threshold will avoid such interferences, the noise level is dynamically adjusted with the bandwidth, the examiner interpret automatically retrieving as automatically

obtaining a threshold noise level that is already calculated and stored in the data structure corresponding to the bandwidth of corresponding type of network connection [0046-0047], Fig 7);

(c) determining a utilization rate of the network connection, wherein the threshold noise level is independent of the utilization rate (the utilization rate is the actual level of utilization [0046] and [0047]);

(d) determining whether the utilization rate of the network connection is below the threshold level (Fig 7; [0046-0047], the network utilization rate is periodically monitored and checked up against the threshold level);

(e) if the utilization rate is below the threshold level, receiving data from the networked device using the method comprising:

(i) determining whether to adjust an amount of data received in a current iteration ([0047], the data download is adjusted if we detect at least two consecutive occurrences of low usage before initiating the download; [0058], the download is accelerated by downloading progressively longer segments of the file over the network);

(ii) if step (i) determines to adjust the amount of data received, adjusting the amount of data to receive according to the type of network connection ([0047], wherein the amount of data is adjusted or downloaded is dependent on two consecutive low occurrences of low usage; threshold level is retrieved from the data structure 110 of Fig 6, and because it is related to the max bandwidth 33% of the maximum, see [0046], then it is related automatically to the network connection type which is already detected by the system); and

(iii) receiving an increased amount of data ([0058]);

(f) if the utilization rate is above the threshold level, pausing a predetermined amount of time before proceeding ([0047]; [0058]; [0061], wherein if there is an increase in network activity after initial downloading of the file, the download is suspended for a predetermined period of time, note that predetermined is taught as the system monitors the status of the network periodically. That is, the

download shall resume upon the detection of predetermined next iteration time, where the threshold drops below the noise threshold); and

(g) repeating steps (c)-(f) until all data in the file is received ([0011]).

7. As per claim 2, Roberts teaches the method of claim 1, further comprising the step of determining a speed of the network connection ([0015]), wherein the type of network connection is determined based on the speed of the network connection ([0046-0047]).

8. As per claim 4, Roberts teaches the method of claim 1, wherein the step of determining the utilization rate of the network connection includes the step of determining how much data has been transferred through the network connection per unit of time (inherent in Fig. 4).

9. As per claim 6, Roberts teaches the method of claim 1, wherein the threshold noise level may be statically, dynamically, or user configurable ([0049], where the threshold noise parameter is dynamically adjusted).

10. As per claim 7, Roberts teaches the method of claim 1, wherein the step of determining whether to adjust the amount of data received in the current iteration includes determining whether a previous iteration resulted in data being received ([0011]; Fig 7).

11. As per claim 12, Roberts teach the method of claim 1, further comprising automatically retrieving a network sample rate parameter corresponding to the network connection type ([0046], [0047], the sample rate is periodically calculated according to the type of network connection type), wherein the step of pausing a predetermined amount of time before proceeding include the step of pausing a predetermined amount of time determined by the network sample rate parameter ([0015], [0067] wherein the sampling time is determined based on network speed).

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claims 3, 8-11, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roberts et al. (hereinafter Roberts), US 2002/0110149, in view of Shaffer et al. (hereinafter Shaffer), US 6,683,889.

14. As per claim 3, Roberts does not explicitly teach the method of claim 1, further comprising the step of defining a size of a receiving buffer according to the type of network connection

In a similar system, Shaffer teaches the concept of adjusting buffer parameter based upon incoming packet types and sizes (Col. 5, lines 23-40), the buffer size is adjusted accordingly to the incoming packets.

It would have been obvious to the person of ordinary skill in the art at the time of the invention to combine teachings of Roberts and Shaffer because dynamic adjustment of buffer parameter based upon incoming packets as taught by Shaffer would result in fine tuning of the buffer length according to the specific characteristics of the packet arrival rate.

15. As per claim 8-10, Roberts does not explicitly teach adjusting a buffer parameter that determines how many times a receiving buffer is read in the current iteration; incrementing the buffer parameter when a previous iteration resulted in a data being received; and until a predetermined maximum buffer value is achieved

In a similar system, Shaffer teaches the concept of adjusting buffer parameter rate based upon incoming packet types and sizes, the packet size determines the times the buffer is read (Col. 5, lines 23-40, Fig 2, wherein the graph on Fig 2 is generated based on each arrival of packets, every time a packet arrives the buffer is read and the status of the buffer is generated accordingly), the amount of times the receiving buffer is read depend directly upon the speed of the incoming packets, the buffer is sampled in accordance with the packet arrival rate; Shaffer also teaches incrementing the buffer parameter when a previous iteration resulted in a data being received (Col. 3, lines 13-17); Shaffer also teaches incrementing the buffer parameter until a predetermined maximum buffer value is achieved (Col. 3, lines 13-17).

It would have been obvious to the person of ordinary skill in the art at the time of the invention to combine the teachings of Roberts and Shaffer because dynamic adjustment of buffer parameter based upon incoming packets as taught by Shaffer would result in fine tuning of the buffer length according to the specific characteristics of the packet arrival rate.

16. As per claim 11, Roberts does not explicitly teach the method of claim 8, wherein the step of adjusting a buffer parameter that determines how many times a receiving buffer is read in the current iteration includes resetting the buffer parameter to a predetermined minimum value when the monitoring of the network connection in the previous iteration resulted in data not being received.

However, it would have been obvious to the person of ordinary skill in the art at the time of the invention to reset the buffer size value when no data is being received in order to re-utilize the buffer.

17. As per claim 13, the claim is rejected for the same reasons as claims 1, 8 above. In addition, Roberts teaches a system for managing the transfer of a file having data from a networked device to a client system, comprising:

means for suspending the receiving of data when utilization of the network connection is not

below the threshold parameter and monitoring the utilization of the network connection ([0047], [0058], [0061]).

However, Roberts does not explicitly say means for receiving an amount of data determined by the buffer parameter when the utilization of the network connection is below the threshold parameter and adjusting the buffer parameter according to the monitoring of the utilization of the network connection

In a similar system, Shaffer teaches the concept of adjustment of the buffer parameters in order to reduce jitters on incoming data packets, these parameters are adjusted accordingly to the rate of the network flow (Col. 3, lines 13-17; Col. 5, lines 10-22).

It would have been obvious to the person of ordinary skill in the art at the time of the invention to combine teachings of Roberts and Shaffer because dynamic adjustment of buffer parameter with respect to the incoming flow, and to allowing for incoming data packets to have no jitters as taught by Shaffer would lead to enhancing the capabilities of Roberts by dynamically allowing for adjusting the buffer parameters with respect to packet arrival rate.

18. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Roberts, as applied to claim 1 above, in view of what was well known in the art.

19. As per claim 14, Roberts does not explicitly teach the threshold noise level is automatically retrieved from a lookup table stored on the client system.

Official Notice is taken (see MPEP 2144.03) storage of noise threshold information on client side is well known and routinely used for processing efficiency purposes at the time of the invention was made.

It would have been obvious to one of ordinary skill in the art to include client side storage of processing information with Roberts because it would provide for increased processing efficiency, by allowing noise threshold information stored in a table predetermined based on connection type (e.g. for

Art Unit: 2152

one network type, it is 33% of the max bandwidth, see [0046]) in order to save system resources from doing complex calculation.

Response to Arguments

20. In the remark, the Applicant argued in substance that Roberts fails to disclose or suggest “automatically retrieving a threshold noise level corresponding to network connection type”

In response to Applicant's amendments, Roberts teaches dynamically determining of threshold noise levels periodically, the threshold noise level is ‘retrieved’ or ‘obtained’ from the signal itself. The threshold level is retrieved from the data structure 110 of Fig. 6, and because it is related to the max. bandwidth (33% of the maximum, see [0046]), then it is related automatically to the network connection type which is already detected by the system.

21. In the remark, the Applicant argued in substance that Roberts fails to disclose or suggest “one threshold level associated with the network type”.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., one threshold level associated with the network type) is not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

22. In the remark, the Applicant argued in substance that Roberts fails to disclose or suggest “wherein the threshold parameter is independent of the utilization of the network connection”.

In response to applicant's argument, Applicant intends to use negative limitation to exclude Roberts et al., US 2002-0110149. Moreover this amendment does not place the application in better condition for allowance. Applicant must show negative result within the specification or point to

Art Unit: 2152

unexpected results regarding to the negative limitation. For the purpose of examination, the Examiner will interpret the limitation as "threshold noise level and utilization rate are two separate variables"

Conclusion

23. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following patents and publications are cited to further show the state of the art with respect to "METHOD AND SYSTEM FOR ADAPTIVELY DOWNLOADING DATA FROM A NETWORK DEVICE".

- | | | |
|------|------------|----------------|
| i. | US 6859460 | Chen |
| ii. | US 6788651 | Brent et al. |
| iii. | US 6683889 | Shaffer et al. |

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chad Zhong whose telephone number is (571)272-3946. The examiner can normally be reached on M-F 7:15 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, JAROENCHONWANIT, BUNJOB can be reached on (571)272-3913. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


BUNJOB JAROENCHONWANIT
SUPERVISORY PATENT EXAMINER

Application/Control Number: 09/912,383

Page 11

Art Unit: 2152

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January 24, 2006